CLAIMS

What is claimed is:

1. A method for validating a bus, comprising:

taking a snapshot of configuration registers of selected bus devices coupled to a host bus adapter;

power cycling the host bus adapter; and

re-initializing the configuration registers of the selected bus devices.

2. The method of Claim 1, wherein the re-initializing of the configuration registers of the selected bus devices is performed in a recursive manner.

3. The method of Claim 1, further comprising storing values from the snapshot of configuration registers of selected bus devices.

4. The method of Claim 3, wherein the values are stored in a file dedicated to configuration information storage.

5. The method of Claim 4, wherein the file dedicated to configuration information storage is an .ini file.

6. The method of Claim 3, further comprising creating at least one data pattern in a memory of the host bus adapter before power cycling the host bus adapter.

7. The method of Claim 6, further comprising powering down the host bus adapter for a predefined period and, after the predefined period expires, powering up the host bus adapter.

8. The method of Claim 7, loading the configuration registers of the selected bus devices with the stored values of the snapshot.

9. The method of Claim 8, further comprising verifying the at least one data pattern in memory of the host bus adapter.

10. The method of Claim 9, further comprising the host bus adapter as one of the group consisting of pass and fail.

11. The method of Claim 1, wherein the host bus adapter is a Peripheral Component Interconnect (PCI) host bus adapter.

12. A system for validating a host bus adapter, comprising:

a host bus;

a processor;

a main memory coupled to the host processor through the host bus;

a first bus; and

a host bus adapter coupled to the processor through the host bus, wherein the processor takes a snapshot of configuration registers of selected devices through the first bus before conducting a test of the host bus adapter.

13. The system of Claim 12, wherein the first bus is a Peripheral Component Interconnect (PCI) bus.

14. The system of Claim 12, wherein the host bus adapter is powered down for a predefined period of time and then is powered up before testing the host bus adapter.

15. The system of Claim 14, wherein the processor has an operating system.

16. The system of Claim 15, wherein the snapshot of configuration registers is stored in a file maintained by the operating system.

17. The system of Claim 16, wherein the predefined period of time is ten seconds.

18. A system for validating a Peripheral Component Interconnect (PCI) host bus adapter, comprising:

a means for providing a communication path;

a means for processing coupled to the means for providing a communication path; and

a means for interfacing with at least one peripheral device over a PCI bus, the means for interfacing coupled to the means for processing by the means for providing a communication path, wherein a snapshot is taken of a configuration register of the at least one peripheral device.

19. The system of Claim 18, wherein the means for interfacing is powered down for a predefined period of time and then powered up.

20. The system of Claim 19, wherein the configuration register is loaded from values stored by the snapshot.

21. A method for validating a Peripheral Component Interconnect (PCI) host bus adapter, comprising:

reading values of all configuration registers of select PCI devices;

storing the values in an .ini file;

creating a data pattern in memory of a Redundant Array of Inexpensive Disks (RAID) controller adapter using a command mailbox protocol;

switching off power to a raiser card using a general purpose input/output (IO) port;

waiting a predefined period of time;

switching on power to the raiser card using the general purpose IO port;

loading all the configuration registers of the select PCI devices with the values from the .ini file;

initializing all configuration registers of the select PCI devices from the loaded values; and

verifying the data pattern in the memory of the RAID controller adapter using the command mailbox protocol.

22. The method of Claim 21, further comprising stamping the host bus adapter as one of the group consisting of PASS and FAIL depending on results from verifying the data pattern.

23. The method of Claim 22, wherein the raiser card is an ADEX raiser card.